

Appl. No. 10/634,890
Amdt dated Jan. 4, 2005
Reply to Office action of Oct. 4, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-20. (Canceled)

21. (New) A safety system for a gas-operated apparatus for generating energy, in which the apparatus, optionally along with a gas supply, is disposed in the vicinity of an occupied space but spatially separated from it, the safety system comprising
- at least one gas-sensitive sensor (6) in the occupied space;
- a control unit (7), which evaluates the output signal of the sensor (6); and
- means for reducing the gas concentration in the occupied space;
- the control unit (7), being operable to reduce the gas concentration in the occupied space as a function of the gas concentration ascertained by the sensor (6), wherein the gas-operated apparatus for generating energy is disposed in a vehicle (1); and wherein the occupied space is the passenger compartment of a vehicle, further comprising power control means (8) responsive to the control unit (7) operable to interrupt the power supply to the vehicle (1) as a function of the potential danger based on the gas concentration ascertained by the sensors (2, 6).
22. (New) The safety system according to claim 21, wherein the gas-operated apparatus for generating energy is a gas-operated internal combustion engine for driving the vehicle (1).

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23. (New) The safety system according to claim 21, wherein the gas-operated apparatus is a fuel cell operable either for driving the vehicle (1) or as an energy source for accessory systems of the vehicle (1).
24. (New) The safety system according to claim 21, wherein the sensor (6) is disposed in the passenger compartment of the vehicle (1).
25. (New) The safety system according to claim 21, further comprising a second sensor (2), which is disposed outside the passenger compartment of the vehicle (1), in particular in the engine compartment of the vehicle (1).
26. (New) The safety system according to claim 25, wherein the sensors (2, 6) are sensitive to hydrogen gas.
27. (New) The safety system according to claim 21, wherein a fresh-air valve (3), power window controls (4), a fan (5), and a warning device (9) are triggerable by the control unit (7) as a function of the output signals from the sensors (2, 6).
28. (New) The safety system according to claim 21, further comprising a warning device is triggered by the control unit (7), which device outputs an optical and/or acoustical signal to warn the vehicle passengers, when a dangerous situation is ascertained by the sensors (2, 6).

29. (New) The safety system according to claim 21, wherein, if a harmful concentration of hydrogen gas is detected in the passenger compartment of the vehicle (1) by the sensor (6), the control unit (7) is triggered to operate at least one fan (5) and/or power window control (4) in such a way that the fastest possible air exchange in the passenger compartment of the vehicle (1) is made possible.

30. (New) A safety system for a gas-operated apparatus for generating energy, in which the apparatus, optionally along with a gas supply, is disposed in the vicinity of an occupied space but spatially separated from it, the safety system comprising

at least one gas-sensitive sensor (6) in the occupied space;
a control unit (7), which evaluates the output signal of the sensor (6); and
means for reducing the gas concentration in the occupied space;
the control unit (7), being operable to reduce the gas concentration in the occupied space as a function of the gas concentration ascertained by the sensor (6), wherein the gas-operated apparatus for generating energy is disposed in a vehicle (1), and wherein the occupied space is the passenger compartment of a vehicle (1), further comprising a second sensor (2), which is disposed outside the passenger compartment of the vehicle (1), wherein, when a harmful concentration of hydrogen gas is measured in the engine compartment of the vehicle (1) by the sensor (2), the control unit (7) triggers at least the fresh-air valve (3) in such a way that it is in the closed position.

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31. (New) The safety system according to claim 30, wherein, when a harmful gas concentration of hydrogen gas is measured by both the sensor (2) and the sensor (6), the control unit (7) triggers the fresh-air valve (3) in such a way that it is in the closed position; and that the power window controls (4) and/or the fan (5) is triggerable by the control unit (7) in such a way that the fastest possible air exchange in the passenger compartment of the vehicle (1) results.

32. (New) The safety system according to claim 30, further comprising a warning device is triggered by the control unit (7), which device outputs an optical and/or acoustical signal to warn the vehicle passengers, when a dangerous situation is ascertained by the sensors (2, 6).

33. (New) A safety system for a gas-operated apparatus for generating energy, in which the apparatus, optionally along with a gas supply, is disposed in the vicinity of an occupied space but spatially separated from it, the safety system comprising

at least one gas-sensitive sensor (6) in the occupied space;
a control unit (7), which evaluates the output signal of the sensor (6); and
means for reducing the gas concentration in the occupied space
the control unit (7) being operable to reduce the gas concentration in the occupied space as a function of the gas concentration ascertained by the sensor (6), wherein the gas-operated apparatus for generating energy is disposed in a vehicle (1); and wherein the occupied space is the passenger compartment of a vehicle (1), and wherein a safety valve disposed in the region of the roof of the vehicle (1) can be opened by the control unit (7) to reduce the gas concentration in the occupied space as a function of the gas concentration ascertained by the sensor (6).